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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/712,967

11/14/2003

Timothy J. Deming

LA-1279-291.US-03

9419

7590 01/09/2007
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EXAMINER

LUKTON, DAVID

ART UNIT

PAPER NUMBER

1654

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

01/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/712,967

Applicant(s)

DEMING, TIMOTHY J.

Examiner

David Lukton

Art Unit

1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 16 is/are allowed.
- 6) ☒ Claim(s) 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Pursuant to the directives of the response filed 10/25/06, claims 16 & 17 have been amended. Claims 16-20 remain pending.

✦

Claim 17 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 13 of U.S. Patent No. 6680365. Although the conflicting claims are not identical, they are not patentably distinct from each other; there is overlap of the claimed subject matter.

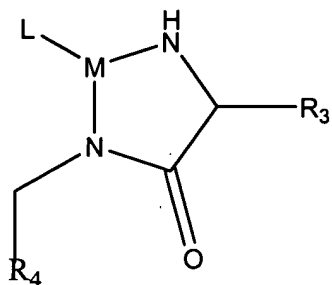
The obviousness-type double patenting rejection is a judicially established doctrine based upon public policy and is primarily intended to prevent prolongation of the patent term by prohibiting claims in a second patent not patentably distinct from claims in a first patent. In re Vogel, 164 USPQ 619 (CCPA 1970). A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) would overcome an actual or provisional rejection on this ground provided the conflicting application or patent is shown to be commonly owned with this application See 37 CFR 1.78(d).

✦

17-20

Claims ~~16-20~~ are rejected under 35 U.S.C. §112 second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- Claim 17 recites that the metallacycle end group *per se* is the following (shown for the case of R₁ and R₂ representing hydrogen, and n = 1):



The claim further recites that, consistent with the foregoing, R_4 is the polyamino acid chain. It appears that what applicants have defined is not the metallacycle end group *per se*, but rather the polyamino acid bearing the metallacycle end group. Would applicants agree with this assessment, and if not, then how would applicants propose to depict the polyamino acid that bears the metallacycle end group...?

- Claim 17 is drawn to a method of adding an NCA to a growing peptide chain. However no process steps are recited. For example, if a chemist were to place a few grams of e.g., glycine NCA in a “first” test tube, and a few grams of the recited amido-containing metallacyclic in a “second” test tube, would the reaction occur spontaneously, or would the chemist have to do something in order to make the reaction occur (e.g., combine the two compounds in a solvent)...?
- In claim 17, substituent variables R_1 , R_2 , R_3 & R_4 are defined. However, these variables do not appear in the formula; instead, variables R_1 , R_2 , R_3 and R_4 appear in the formula. Consistency should be maintained.
- One could argue that in claim 20, there is antecedent basis for the term “amino acid N-carboxyanhydride monomer”. However, **alpha**-amino acid N-carboxyanhydride monomer is another matter; antecedent basis for this term is lacking.
- In claim 18, the term “the initiator” lacks antecedent basis (although there is antecedent basis for “initiator molecule complex”).
- In claim 18, the phrase “the reaction” lacks antecedent basis.

- In claim 18, the term "the efficiency" lacks antecedent basis. It is also not apparent what the objective of the efficiency might be, and how one would distinguish an efficient initiator from one which is not so efficient. Another issue pertains to the recitation of the term "control". This term implies that one might endeavor to reduce the efficiency to a low level. Why one might want to do such a thing is unclear, although that is not the point. Consider the following three scenarios:

Suppose that there is a "first" chemist who wants to minimize the efficiency of the initiator, and so he chooses a solvent which is effective to influence the reaction in some way.

Suppose that there is a "second" chemist who wants to maximize the efficiency of the initiator, and so she chooses a solvent which is effective to influence the reaction in some way.

Suppose that there is a "third" chemist who is able to find a solvent that has no effect on the reaction one way or another.

One of the questions that would arise is, if the first chemist and the second chemist were to choose the same solvent, which chemist would achieve the higher efficiency? And where in the spectrum of efficiencies would the third chemist fall?

✦

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lukton whose telephone number is 571-272-0952. The examiner can normally be reached Monday-Friday from 9:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cecilia Tsang, can be reached at (571)272-0562. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-1600.



DAVID LUKTON, PH.D.
PRIMARY EXAMINER